

Critical Congenital Heart Disease Screening and Reporting



Missouri Department of Health and Senior Services
November 9, 2017

CHD vs. CCHD

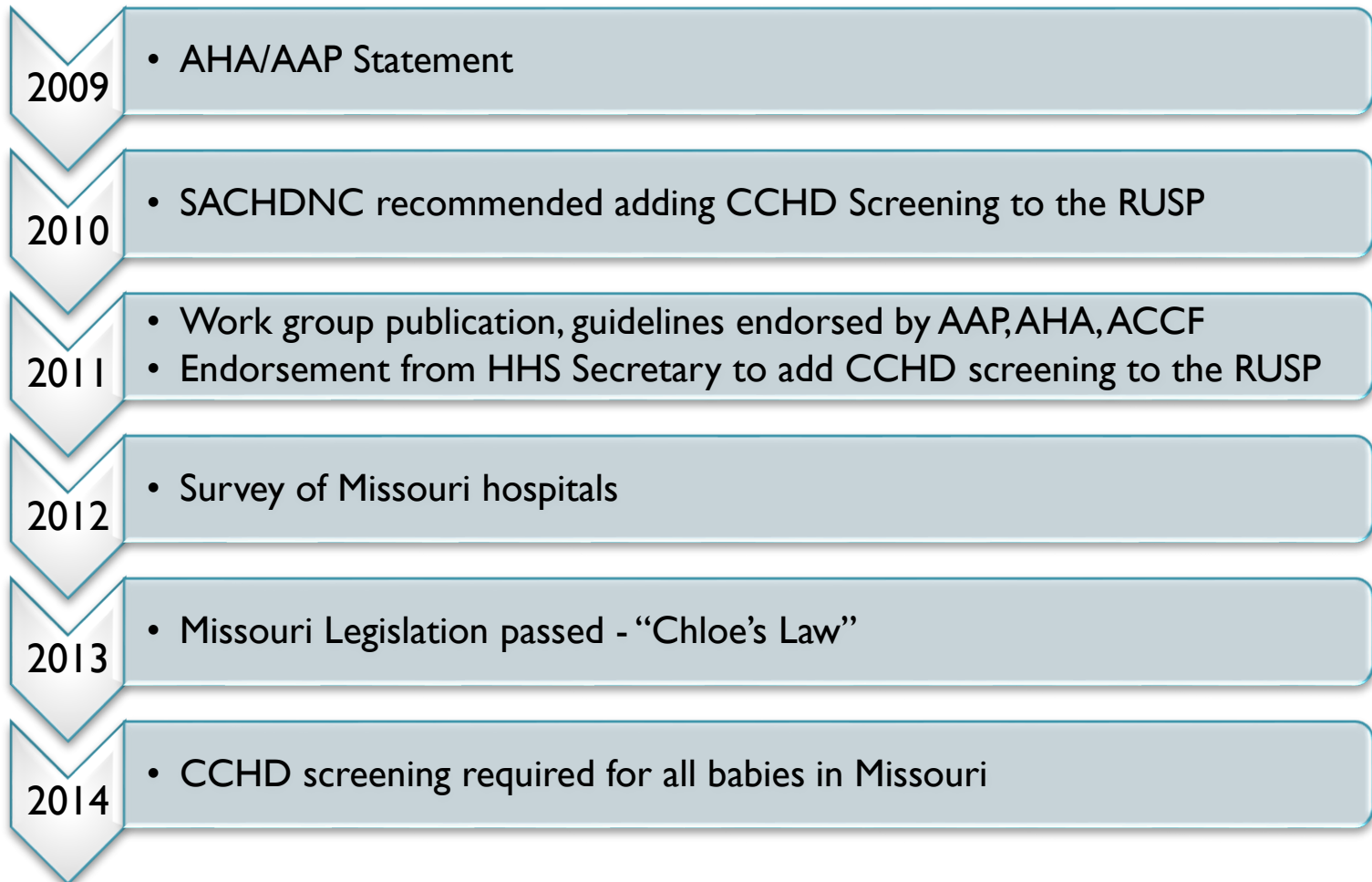
Congenital Heart Defects (CHD):

- Present at birth and can affect the structure of a baby's heart and the way it works, varying from mild to severe.
- Affect approximately 1% of, or about 40,000, births per year in the United States.
- Most common type of birth defect.
- Leading cause of birth defect-associated infant illness and death.

Critical Congenital Heart Defects (CCHD):

- Specific CHDs which require surgery or catheter intervention within the first year of life.
- About 1 in every 4 babies born with a heart defect has a CCHD.
- Typically lead to low levels of oxygen in the newborn and may be identified by pulse oximetry at 24 hours of age.


Screening Background/Timeline




Chloe's Law

- 191.334 Revised Statutes of Missouri
 - Every newborn born in Missouri must be screened for CCHD beginning January 1, 2014.
 - Screening shall be done by pulse ox or in another manner as directed by the department in accordance with AAP and AHA guidelines.
 - Results shall be reported to the parents or guardians and to the department in a manner prescribed by the department for surveillance purposes.
 - Facilities/Individuals shall develop and implement plans to ensure that newborns with a positive screen receive appropriate confirmatory procedures and referral for treatment as indicated.

Voluntary Aggregate Reporting



Missouri Department of Health and Senior Services
P.O. Box 570, Jefferson City, MO 65102-0570 Phone: 573-751-6400 FAX: 573-751-6010
RELAY MISSOURI for Hearing and Speech Impaired 1-800-735-2966 VOICE 1-800-735-2496
Gail Vastlering
Director



Jeremiah W. (Jay) Nixon
Governor

Critical Congenital Heart Disease Aggregate Reporting Form

The Department of Health and Senior Services requests that all ambulatory surgical centers, hospitals, birthing centers, and midwives who attend home births voluntarily provide aggregate Critical Congenital Heart Disease (CCHD) screening data monthly. Please complete the form below and mail to the Department of Health and Senior Services, Bureau of Genetics and Healthy Childhood, PO Box 570, Jefferson City, MO 65102 or fax to 573-751-6185.

For questions or concerns, please contact the Bureau of Genetics and Healthy Childhood at 573-751-6266.

Ambulatory Surgical Center/Birth Hospital/Birthing Center/Midwife: _____

Contact Name: _____

Contact Phone Number: _____

Reporting Period for Month of: _____

Total Number of Newborns Screened	
Total Number of Newborns with a Negative Screen (Pass)	
Total Number of Newborns with a Positive Screen (Fail/Refer)	
Total Number of Newborns Not Screened Due to:	
Prenatal CCHD diagnosis	
Condition Unstable/Required Critical Intervention	
Parents Refused	
Transferred	
Expired	

www.health.mo.gov
Healthy Missourians for life.
The Missouri Department of Health and Senior Services will be the leader in promoting, protecting and partnering for health.
AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER. Services provided on a nondiscriminatory basis.

(10/13)

- Number of Newborns Screened
- Number with a Negative Screen (Pass)
- Number with a Positive Screen (Fail)
- Number Not Screened
 - Prenatal CCHD diagnosis
 - Condition Unstable
 - Parents Refused
 - Transferred
 - Expired

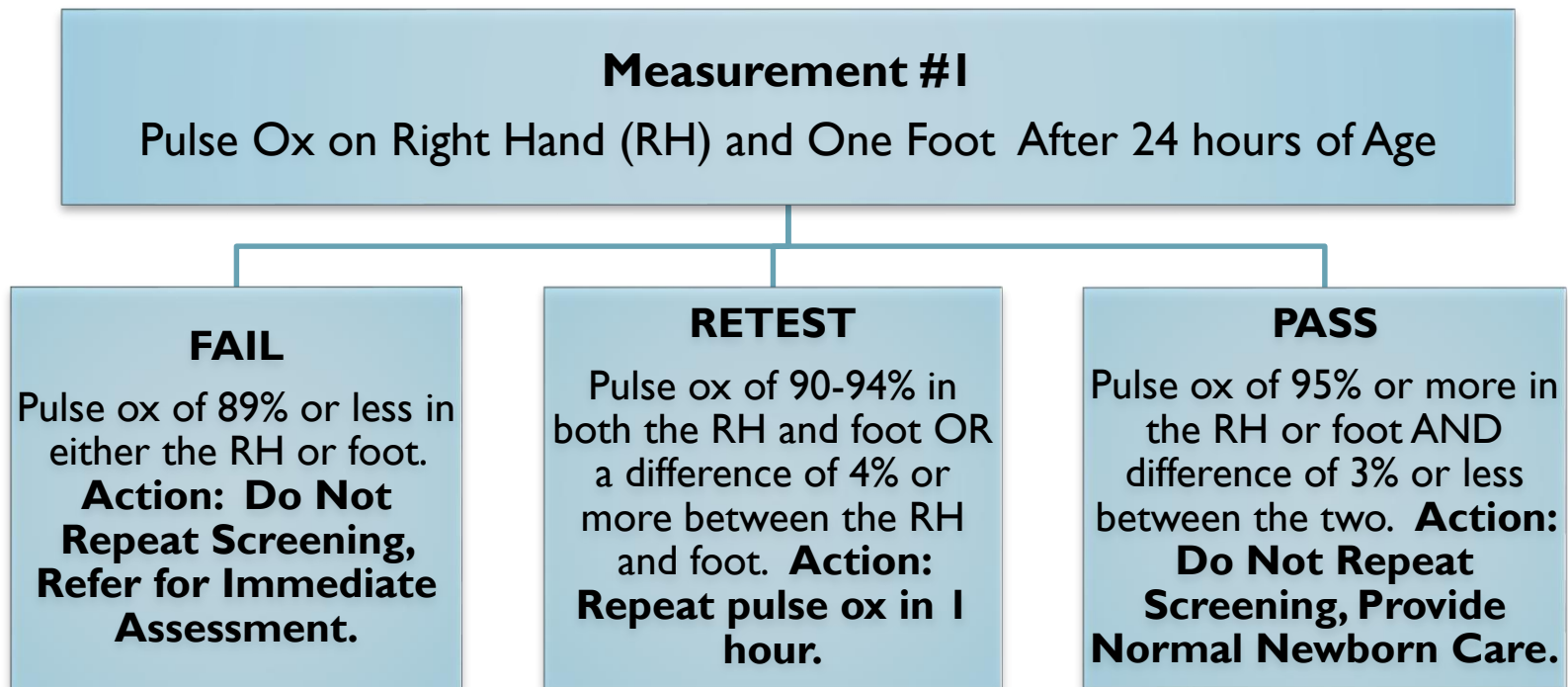
19 CSR 40-12.010

- Final rules for CCHD screening have been filed with the Secretary of State.
- Will become effective **November 30, 2017.**
- Rules establish screening guidelines and provide direction for the reporting of screening results.
- Requires screening to be done by pulse ox in accordance with AAP and AHA guidelines.
- Requires all screening results and refusals to be reported utilizing either the Missouri Electronic Vital Records (MoEVR) system or paper form.
- Screening results must be reported within 30 calendar days of completion of CCHD screening.

Screening Guidelines

- Recommended guidelines endorsed by the AAP and AHA.
 - Kemper, A., et al. (2011). Strategies for implementing screening for critical congenital heart disease. *Pediatrics*, vol 128 no. 5, pp e1259-e1267.
 - Article can be found at www.health.mo.gov/cchd

Screening Guidelines



Screening Guidelines

Measurement #2

Pulse Ox on Right Hand (RH) and One Foot 1 Hour After Measurement #1

FAIL

Pulse ox of 89% or less in either the RH or foot.

Action: Do Not Repeat Screening, Refer for Immediate Assessment.

RETEST

Pulse ox of 90-94% in both the RH and foot OR a difference of 4% or more between the RH and foot. **Action: Repeat pulse ox in 1 hour.**

PASS

Pulse ox of 95% or more in the RH or foot AND difference of 3% or less between the two. **Action: Do Not Repeat Screening, Provide Normal Newborn Care.**

Screening Guidelines

Measurement #3

Pulse Ox on Right Hand (RH) and One Foot 1 Hour After Measurement #2

FAIL

Pulse ox of 89% or less in either the RH or foot.

Action: Do Not Repeat Screening, Refer for Immediate Assessment.

RETEST

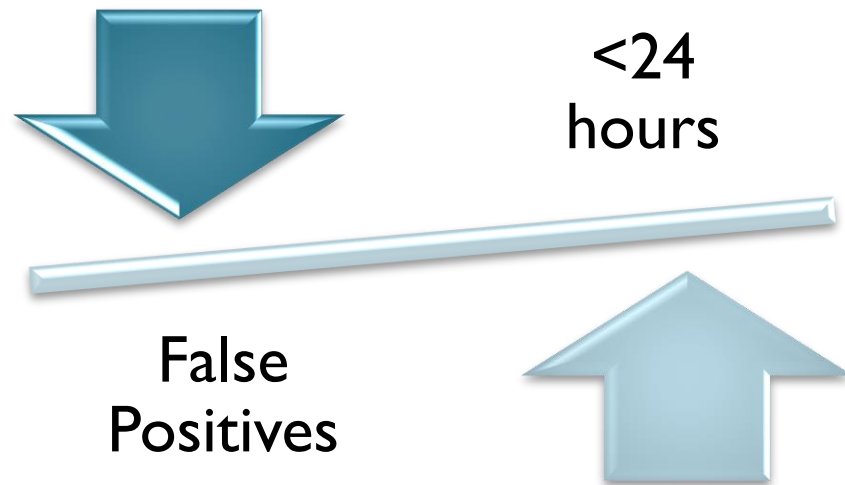
Pulse ox of 90-94% in both the RH and foot OR a difference of 4% or more between the RH and foot. **Action: Do Not Repeat, Refer for Clinical Assessment.**

PASS

Pulse ox of 95% or more in the RH or foot AND difference of 3% or less between the two. **Action: Do Not Repeat Screening, Provide Normal Newborn Care.**

Age at Screening

- CCHD screening should be performed at 24 to 48 hours of age.
 - False positives are significantly higher when screening is done prior to 24 hours of age.



Screening Sites

- Screening should be performed on the right hand (pre-ductal) AND either foot (post-ductal)



RH application site



Foot application site



MoEVR

The Missouri Electronic Vital Records (MoEVR) system is an online data entry system used to support the registration of Missouri vital events for the DHSS and other users such as birthing facilities, attending physicians, funeral directors, and medical examiners.



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES
BUREAU OF VITAL RECORDS
VITAL RECORDS USER ACCESS REQUEST

P.O. BOX 570
JEFFERSON CITY, MO 65102-0570
TELEPHONE (573) 526-0348
FAX (573) 526-3846

Save

Print

Reset

Send completed form to Bureau of Vital Records at the address above. (Attach separate sheet if necessary). PLEASE PRINT.

IDENTIFYING INFORMATION

NAME (LAST, FIRST, MI)		ACTION REQUESTED <input type="checkbox"/> ADD USER <input type="checkbox"/> ADD ACCESS <input type="checkbox"/> DELETE USER <input type="checkbox"/> DELETE ACCESS <input type="checkbox"/> TRANSFER <input type="checkbox"/> NAME CHANGE		PREFERRED METHOD OF CONTACT <input type="checkbox"/> E-MAIL <input type="checkbox"/> FAX <input type="checkbox"/> TELEPHONE <input type="checkbox"/> QUEUE	
OFFICE ADDRESS (STREET, CITY, ZIP)					
SOCIAL SECURITY NUMBER (LAST 4 DIGITS ONLY)		COUNTY (FOR MEDICAL EXAMINER/CORONER ONLY)			
E-MAIL ADDRESS					
OFFICE TELEPHONE		OFFICE FAX		FORMER NAME	

SELECT ROLE(S) THAT APPLY:

DATA ENTRY: This role will allow data entry of birth records, death records and/or fetal death records. The role allows access to pending queues and may allow submission of birth records, death records and/or fetal death records to the Missouri Department of Health and Senior Services, Bureau of Vital Records.

BIRTH <input type="checkbox"/> Data Entry Clerk-Facility <input type="checkbox"/> Data Entry Clerk-Hearing Screening <input type="checkbox"/> Data Entry Clerk-CCHD	DEATH <input type="checkbox"/> Funeral Director <input type="checkbox"/> Data Entry Clerk-Funeral Home <input type="checkbox"/> Data Entry Clerk-Medical Examiner/Coroner	DEATH <input type="checkbox"/> Data Entry Clerk-Physician <input type="checkbox"/> Data Entry Clerk-Physician Assistant <input type="checkbox"/> Data Entry Clerk-Assistant Physician <input type="checkbox"/> Data Entry Clerk-Advanced Practice Registered Nurse	FETAL DEATH <input type="checkbox"/> Person Entering Report
---	---	---	---

CERTIFIER/DE-CERTIFIER: This role will allow certification or de-certification of birth records, death records and/or fetal death records. The role allows access to pending certification queues and may allow submission of birth records, death records and/or fetal death records to the Missouri Department of Health and Senior Services, Bureau of Vital Records.

BIRTH <input type="checkbox"/> Facility Certifier/Midwife <input type="checkbox"/> Physician (MD/DO)	DEATH <input type="checkbox"/> Physician (MD/DO) <input type="checkbox"/> Medical Examiner/Coroner	DEATH <input type="checkbox"/> Physician Assistant <input type="checkbox"/> Assistant Physician <input type="checkbox"/> Advanced Practice Registered Nurse	EMBALMER <input type="checkbox"/> Embalmer
---	---	---	--

LICENSED FUNERAL DIRECTOR LICENSE NUMBER	Facility: List name and complete address of each facility associated for this user. Funeral homes: Include funeral establishment license number for each facility. Data Entry Clerk or Person authorized to enter medical information: List name and license number for each physician/medical certifier associated with this user. Attach additional page(s) if necessary.
---	--

LICENSED CERTIFIER <input type="checkbox"/> MD <input type="checkbox"/> DO	<input type="checkbox"/> Physician Assistant <input type="checkbox"/> Assistant Physician <input type="checkbox"/> Advanced Practice Registered Nurse
---	---

LICENSE NUMBER	NPI
-----------------------	------------

LICENSED EMBALMER These roles are for the purpose of complying with embalming requirements.	
---	--

<input type="checkbox"/> Licensed Embalmer	LICENSE NUMBER
--	-----------------------

<input type="checkbox"/> Student Embalmer	LICENSE NUMBER
---	-----------------------

Failure to comply with embalming requirements constitutes grounds for revocation of license.

COMMENT

SECURITY STATEMENT/APPROVALS

I, the undersigned, an employee of the facility listed above and user of the Missouri Department of Health and Senior Services, Vital Records MoEVR Web system, understand that approval and assignment of the requested ID or approval of the requested change enables me to access the resources which, by law, must be utilized only in the performance of my assigned duties. Therefore, I agree to make no inquiries or updates which are not required in the performance of my official duties. I understand that state and federal statutes require confidentiality of information and provide penalties for unauthorized access, use and/or disclosure of information. Violations or disclosures on my part may result in disciplinary action that could be one or all of the following: (1) suspension or dismissal from the system or (2) civil court action. I agree to keep confidential all information made available to me in the performance of my official duties. In addition, I agree not to divulge or share my password with anyone.

USER SIGNATURE	DATE	SUPERVISOR/SUPERVISING PHYSICIAN SIGNATURE	DATE
----------------	------	--	------

DEPARTMENT USE ONLY

DIVISION/PROGRAM SIGNATURE	DATE	DIVISION/PROGRAM SIGNATURE	DATE
----------------------------	------	----------------------------	------

- To access the MoEVR website, the application form, **Vital Records User Access Request**, must be completed by the applicant and approved by the Bureau of Vital Records.
- To obtain this form, you will need to contact the Bureau of Vital Records either by
 - phone at 573-526-0348 or
 - email at moevrsupport@health.mo.gov.
- Vital Records will not process requests for access to CCHD data entry until November 30th.

Logging into MoEVR

- The web address to log into MoEVR is:
<https://moevr.dhss.mo.gov/moevr/gui/login/welcomeMO.jsp>.

PHONE . FAX
P (573) 751-7149
F (573) 526-3846

PHYSICAL . ADDRESS
930 Wildwood Drive
Jefferson City, Missouri 65109

MAILING . ADDRESS
Missouri Department of
Health and Senior Services
Bureau of Vital Records
P.O. Box 570
Jefferson City, MO 65102



MISSOURI ELECTRONIC VITAL RECORDS

The purpose of the Missouri Electronic Vital Records (MoEVR) system is to support the registration of Missouri vital events for the Missouri Department of Health and Senior Services and other users such as funeral directors, attending physicians, medical examiners and birthing facilities. This system may be used only for the purpose for which it is provided. Any attempt to file fraudulent certificates of live birth, death or reports of fetal death is punishable in accordance with Missouri statutes.

By accessing this system, I agree to use this system only for the purpose of registering a Certificate of Live Birth, Certificate of Death or Report of Fetal Death for events occurring in the State of Missouri.

I understand that failure to adhere to the above agreement will result in loss of access to the MoEVR system. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

LOGIN

Logging into MoEVR

1



WARNING:
MISSOURI ANALYST SITE

Notice: You are about to gain access to the Missouri Department of Health and Senior Services, Bureau of Vital Records, MoEVR system. By proceeding, you are agreeing to maintain the confidentiality of all information as required by applicable state and federal laws. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

Username: [Forgot Username?](#)

Continue

Reset

2



WARNING:
MISSOURI ANALYST SITE

Notice: You are about to gain access to the Missouri Department of Health and Senior Services, Bureau of Vital Records, MoEVR system. By proceeding, you are agreeing to maintain the confidentiality of all information as required by applicable state and federal laws. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

What is the name of your favorite childhood friend?

Answer: [Forgot Answer?](#)

Continue

Reset

3



WARNING:
MISSOURI ANALYST SITE

Notice: You are about to gain access to the Missouri Department of Health and Senior Services, Bureau of Vital Records, MoEVR system. By proceeding, you are agreeing to maintain the confidentiality of all information as required by applicable state and federal laws. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

Please Note
Identify your Image and Key. Press Cancel if they don't match.



flowers

[Forgot Image or Key?](#)

Continue

Cancel

4



WARNING:
MISSOURI ANALYST SITE

Notice: You are about to gain access to the Missouri Department of Health and Senior Services, Bureau of Vital Records, MoEVR system. By proceeding, you are agreeing to maintain the confidentiality of all information as required by applicable state and federal laws. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

Password: [Forgot Password?](#)

Log In

Reset

Where to go next...

Logged in as:
ROBYN CARRENDER
at WOMENS AND CHILDRENS HOSPITAL - 10512
Unit: WOMENS AND CHILDRENS HOSPITAL - 10512



Main
Birth | System

No open tasks

Task Description

Date Created

[Refresh](#)

Logged in as:
ROBYN CARRENDER
at WOMENS AND CHILDRENS HOSPITAL - 10512
Unit: WOMENS AND CHILDRENS HOSPITAL - 10512



Main -- Birth
Hearing Screening

No open tasks

Task Description

Date Created

[Refresh](#)

Logged in as:
ROBYN CARRENDER
at WOMENS AND CHILDRENS HOSPITAL - 10512
Unit: WOMENS AND CHILDRENS HOSPITAL - 10512



Main -- Birth -- Hearing Screening
Update

No open tasks

Task Description

Date Created

[Refresh](#)

Searching for Records

Main -- Birth -- Hearing Screening -- Update

Registrant

Child's Name		Date of Birth	
First	BABY	Date of birth (mm/dd/yyyy)	01/01/2014
Middle	LITTLE	From	
Last	GIRL	To	
Soundex on last name <input type="checkbox"/>			
Child's Gender		Mother's name	
Sex	FEMALE	First	MAMMA
		Last	FOR
		Maiden name	BABY
		Father's name	
		First	DADDY
		Last	BABY

- The information provided in this form will be used to search birth records from your facility only.
- Birth certificate data must be entered into the MoEVR system prior to this time in order for the baby's information to be located.

Searching for Records

Logged in as:
ROBYN CARRENDER
at WOMENS AND CHILDRENS HOSPITAL - 10512
Unit: WOMENS AND CHILDRENS HOSPITAL - 10512

Version: RLS-3-21-SRV2
06/19/2014 11:48 AM
Logout | Help | Accent Characters

Main -- Birth -- Hearing Screening -- Update

Records List (1 Records found)

Last Name	First Name	Birth Date	Sex	Mother's maiden name	
TEST	ADAM	09/08/2011	M	TEST	Details



- A list of records will be shown. The child's first and last name, date of birth, sex, and mother's maiden name will appear on the screen.
- If your search criteria were broad, you may have a longer list of names to choose from.
- Click on "Details"

Searching for Records

Main -- Birth -- Hearing Screening -- **Update**

Record Details

1 Baby and Mother | 2 Hearing Screening | 3 CCHD Reporting

Medical Record Numbers Mother's medical record number: Newborn's medical record number:: 1258	Sex Sex:: M
Baby's Name First:: POOH Middle:: Last:: BEAR Suffix::	Mother's Current Legal Name First:: MAMA Middle:: Last:: BEAR Suffix::
Date of Birth Date of birth:: 11/05/2013 Date of birth numeric field: 20131105	Mother's Name Prior to First Marriage First:: MAMA Middle:: Last:: BEAR Suffix::
Time of Birth Time of birth:: 08:00 Time indicator:: A	Birth/Transfer Facility Birth Facility name: WOMENS AND CHILDRENS HOSPITAL Newborn transferred within 24 hours of delivery?: N Transferred to name:



- This screen gives you the opportunity to review the record to ensure it is the correct baby.
- After verifying that you have the correct record, click “Continue.”

Documenting Screening Results

Main -- Birth -- Hearing Screening -- Update

1 Baby and Mother | 2 Hearing Screening | 3 CCHD Reporting

Medical Record Numbers
Mother's medical record number:
Newborn's medical record number: 1258

Baby's Name
First: POOH
Middle:
Last: BEAR
Suffix:

Date of Birth
Date of birth: 11/05/2013

Time of Birth
Time of birth: 08:00
Time indicator: A
(A=AM; P=PM; M=military; N=noon; D=midnight; U=unknown)

Sex
Sex: M

Mother's Current Legal Name
First: MAMA
Middle:
Last: BEAR
Suffix:

Mother's Name Prior to First Marriage
First: MAMA
Middle:
Last: BEAR
Suffix:

Birth/Transfer Facility
Birth Facility name: WOMENS AND CHILDRENS HOSPITAL
Newborn transferred within 24 hours of delivery? N
Transferred to name:
Facility ID (infant transferred to):

Previous Next Finish Cancel

- “Cover page” for the data entry screens.
- You can navigate the data entry screens one of two ways:
 - Tabs at top of page
 - Buttons at bottom of page
- Click “Next.” Do not click the finish button until you have entered in all screening data.

Documenting Screening Results

Main -- Birth -- Hearing Screening -- Update

1 Baby and Mother | 2 Hearing Screening | 3 CCHD Reporting

Hearing Screening

Was a hearing screening test performed? No

Hearing Results and Methods

Left ear results Select Left ear method Select

Right ear results Select Right ear method Select

Screening Date

Date of screening (MMDDYYYY)

Not Screened

Reason not screened Deceased

Specify other reason

Screening Before Discharge

Did screening occur prior to discharge? Select

Bloodspot/Hearing Lab Form Number

Bloodspot/Hearing form number H999999999

Re-enter bloodspot/hearing form number

Discharge Disposition

Discharge disposition Select

Screener

Screener Select

Hearing Risk Factors (check all that apply)

☐ No risk factors

☐ Caregiver concern regarding hearing status

☐ Family history of permanent childhood hearing loss

☐ ECMO

☐ In-utero infection (e.g. CMV, herpes, rubella, syphilis and toxoplasmosis)

☐ Syndrome/physical finding associated with hearing loss

☐ Neurodegenerative disorder

☐ Culture positive postnatal infection associated with hearing loss (e.g. meningitis)

☐ Chemotherapy

☐ NICU stay more than 5 days

☐ Head trauma (e.g. basal skull/temporal bone fracture)

☐ Ventilation support

☐ Hyperbilirubinemia with transfusion

☐ Ototoxic medications (e.g. gentimycin, tobramycin)

☐ Loop diuretics (e.g. furosemide)

☐ Craniofacial anomalies

Other, specify

Newborn's Primary Care Physician/Clinic

Name

Hearing Screening Comments

Previous Next Finish Cancel


- This is the hearing screening data entry screen.
- If you do not have access to hearing screening data entry, you will not be able to manipulate the fields in this screen.
- Click on “Next.”

Documenting Screening Results

Main -- Birth -- Hearing Screening -- Update

1 Baby and Mother | **2 Hearing Screening** | **3 CCHD Reporting**

Critical Congenital Heart Disease (CCHD)

CCHD Screen completed? 

First CCHD Screening Result

Date of Screen (MMDDYYYY)
Time of Screen
Time Indicator
SpO2 Right Hand %
SpO2 Foot %
Screening Outcome
Not Screened due to:
Other, specify

Second CCHD Screening Result

Was second CCHD screen completed?
Date of Screen (MMDDYYYY)
Time of Screen
Time Indicator
SpO2 Right Hand %
SpO2 Foot %
Screening Outcome
Not Screened due to:
Other, specify

Third CCHD Screening Result

Was third CCHD screening completed?
Date of Screen (MMDDYYYY)
Time of Screen
Time Indicator
SpO2 Right Hand %
SpO2 Foot %
Screening Outcome
Not Screened due to:
Other, specify

Final Disposition

Echocardiogram completed?
Status?
Other, specify

CCHD Comments

- You must first document if screening was completed.
- Boxes that are yellow cannot be manipulated.
- Based on your documentation, certain fields will turn white to allow for further data entry.

Documenting Screening Results

Main -- Birth -- Hearing Screening -- Update

1 Baby and Mother | **2 Hearing Screening** | **3 CCHD Reporting**

Critical Congenital Heart Disease (CCHD)

CCHD Screen completed? Yes

First CCHD Screening Result

Date of Screen (MMDDYYYY) 10/01/2017

Time of Screen 10:00

Time Indicator Military

SpO2 Right Hand % 97

SpO2 Foot % 93

Screening Outcome R = Repeat Screen in 1 hour

Not Screened due to: Select

Other, specify

Second CCHD Screening Result

Was second CCHD screen completed? Yes

Date of Screen (MMDDYYYY) 10/01/2017

Time of Screen 11:00

Time Indicator Military

SpO2 Right Hand % 98

SpO2 Foot % 96

Screening Outcome P = Pass

Not Screened due to: Select

Other, specify

Third CCHD Screening Result

Was third CCHD screening completed? Select

Date of Screen (MMDDYYYY)

Time of Screen

Time Indicator Select

SpO2 Right Hand %

SpO2 Foot %

Screening Outcome Select

Not Screened due to: Select

Other, specify

Final Disposition

Echocardiogram completed? Select

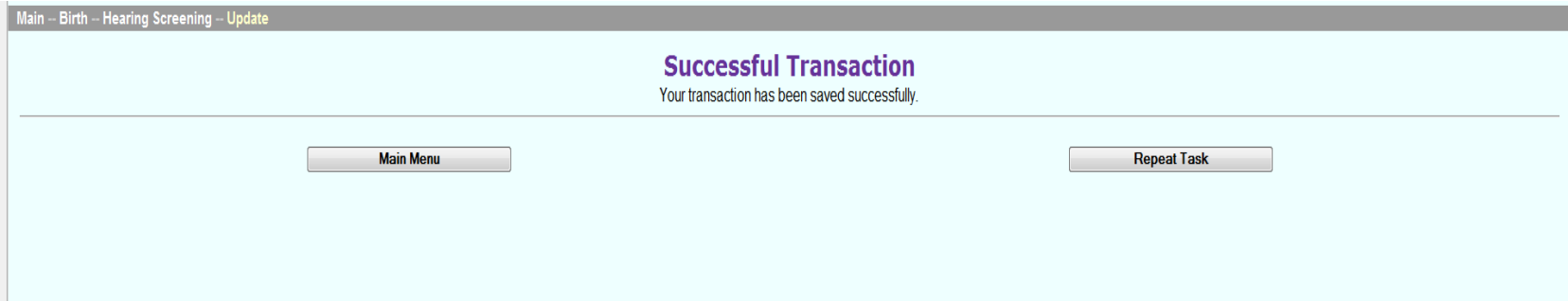
Status? W = Within Normal Limits

Other, specify

CCHD Comments

- Please utilize the comments box to provide any clarifying information applicable to the baby's screening or disposition.
- Once all applicable data fields have been completed, click "Finish."
- Do not click Cancel. All data will be lost and you will have to start over.

Documenting Screening Results



- “Repeat Task” – click to go back to the Registrant entry screen to search for another record
- “Main Menu” – this will take you back to the very beginning



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES
BUREAU OF GENETICS AND HEALTHY CHILDHOOD

Critical Congenital Heart Disease (CCHD) Reporting Form

Instructions: Please complete the information below and submit to the Department of Health and Senior Services by one of the following methods:

Mail – Bureau of Genetics and Healthy Childhood, PO Box 570, Jefferson City, MO 65109 or Fax – 573-751-6185

DEMOGRAPHIC INFORMATION			
NEWBORN'S NAME (LAST, FIRST)	DATE OF BIRTH _/_/_/_	GENDER <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	BIRTH ORDER (A-F OR S = SINGLE)
MOTHER'S NAME (LAST, FIRST)	NEWBORN'S BIRTH LOCATION <input type="checkbox"/> HOSPITAL <input type="checkbox"/> BIRTHING CENTER <input type="checkbox"/> HOME <input type="checkbox"/> AMBULATORY SURGICAL CENTER <input type="checkbox"/> OTHER _____		NEWBORN'S MEDICAL RECORD NUMBER
MOTHER'S STREET ADDRESS/P.O. BOX		CITY	STATE ZIP CODE
FIRST CCHD SCREENING RESULT			
First Screen Completed? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes	Date of First Screen _/_/_/_ Time of First Screen _:_: A.M. P.M. SpO2 Right Hand _____% SpO2 Foot _____% First Screening Outcome: <input type="checkbox"/> Pass (screening complete) <input type="checkbox"/> Repeat Screen in 1 hour <input type="checkbox"/> Fail (refer for immediate evaluation)	If Yes	Date of Second Screen _/_/_/_ Time of Second Screen _:_: A.M. P.M. SpO2 Right Hand _____% SpO2 Foot _____% Second Screening Outcome: <input type="checkbox"/> Pass (screening complete) <input type="checkbox"/> Repeat Screen in 1 hour <input type="checkbox"/> Fail (refer for immediate evaluation)
If No	Not Screened due to: <input type="checkbox"/> CCHD diagnosed prenatally <input type="checkbox"/> CCHD diagnosed clinically at birth <input type="checkbox"/> CCHD ruled out by echocardiogram <input type="checkbox"/> Transferred prior to screening <input type="checkbox"/> Parents refused screening <input type="checkbox"/> Expired <input type="checkbox"/> Other _____	If No	Not Screened due to: <input type="checkbox"/> Low value on previous screen/Referred for evaluation <input type="checkbox"/> Passed previous screen <input type="checkbox"/> CCHD ruled out by echocardiogram <input type="checkbox"/> Transferred prior to screening <input type="checkbox"/> Parents refused screening <input type="checkbox"/> Expired <input type="checkbox"/> Other _____
THIRD CCHD SCREENING RESULT			
Third Screen Completed? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes	Date of Third Screen _/_/_/_ Time of Third Screen _:_: A.M. P.M. SpO2 Right Hand _____% SpO2 Foot _____% Third Screening Outcome: <input type="checkbox"/> Pass (screening complete) <input type="checkbox"/> Fail (refer for immediate evaluation)	If Yes	Date of Third Screen _/_/_/_ Time of Third Screen _:_: A.M. P.M. SpO2 Right Hand _____% SpO2 Foot _____% Third Screening Outcome: <input type="checkbox"/> Pass (screening complete) <input type="checkbox"/> Fail (refer for immediate evaluation)
If No	Not Screened due to: <input type="checkbox"/> Low value on previous screen/Referred for evaluation <input type="checkbox"/> Passed previous screen <input type="checkbox"/> CCHD ruled out by echocardiogram <input type="checkbox"/> Transferred prior to screening <input type="checkbox"/> Parents refused screening <input type="checkbox"/> Expired <input type="checkbox"/> Other _____	If No	Not Screened due to: <input type="checkbox"/> Low value on previous screen/Referred for evaluation <input type="checkbox"/> Passed previous screen <input type="checkbox"/> CCHD ruled out by echocardiogram <input type="checkbox"/> Transferred prior to screening <input type="checkbox"/> Parents refused screening <input type="checkbox"/> Expired <input type="checkbox"/> Other _____
FINAL DISPOSITION			
Echocardiogram completed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		Status: <input type="checkbox"/> Within Normal Limits <input type="checkbox"/> Pneumonia <input type="checkbox"/> Unknown <input type="checkbox"/> Other respiratory condition <input type="checkbox"/> Delayed Transition <input type="checkbox"/> Sepsis <input type="checkbox"/> Critical Congenital Heart Disease <input type="checkbox"/> Other _____ <input type="checkbox"/> Non-Critical Congenital Heart Disease	
Newborn transferred to referral hospital? <input type="checkbox"/> No <input type="checkbox"/> Yes, newborn was transferred to _____			

Critical Congenital Heart Disease Screening Table

Right Hand	Either Foot											
100	100	99	98	97	96	95	94	93	92	91	90	<90
99	100	99	98	97	96	95	94	93	92	91	90	<90
98	100	99	98	97	96	95	94	93	92	91	90	<90
97	100	99	98	97	96	95	94	93	92	91	90	<90
96	100	99	98	97	96	95	94	93	92	91	90	<90
95	100	99	98	97	96	95	94	93	92	91	90	<90
94	100	99	98	97	96	95	94	93	92	91	90	<90
93	100	99	98	97	96	95	94	93	92	91	90	<90
92	100	99	98	97	96	95	94	93	92	91	90	<90
91	100	99	98	97	96	95	94	93	92	91	90	<90
90	100	99	98	97	96	95	94	93	92	91	90	<90
<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90

Pass: 95% or higher in the right hand or either foot AND a difference of 3% or less between the right hand and either foot.

Repeat Screen: 90-94% in the right hand and either foot OR a difference of 4% or more between the right hand and either foot. Repeat screening in one hour. If third screen is still in the yellow, it is a fail and should be reported to the physician.

Fail: 89% or lower in the right hand or either foot (at any time) OR if the third screen is 90-94% in the right hand and either foot or a difference of 4% or more between the right hand and either foot. Failed screenings should always be reported to the physician.

Next Steps

- Rules become effective November 30, 2017.
- After Rules are effective, additional information will be posted on the DHSS CCHD screening web page: www.health.mo.gov/cchd.
 - Final Rules for 19 CSR 40-12.010
 - Link to MoEVR
 - MoEVR Reporting User Manual
 - Paper reporting form
- Hospitals will need to determine who will be responsible for data entry. After November 30th, those individuals will need to submit requests for MoEVR CCHD data entry access.
- After receiving approval, they can begin entering screening data into MoEVR.

Contact Info

Jami Kiesling, RN, BSN

Newborn Screening Program

Bureau of Genetics and Healthy Childhood

jami.kiesling@health.mo.gov

573-751-6266

